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ABSTRACT

This study focused on how students' precollege experiences predisposed them to three democratic outcomes: (1) ability to see the world from someone else's point of view; (2) beliefs about whether conflict enhances democracy; and (3) views about the importance of engaging in social action activities. Data from three flagship universities were analyzed as part of a nationally funded research project, Preparing Students for a Diverse Democracy. Responses from 7,980 entering students indicated that females were more likely than males to report values and beliefs consistent with democratic outcomes. Participation in race/ethnic discussions, student clubs, and volunteer work, as well as studying with students of different groups, and discussing controversial issues were significant predictors in all three models. Results also indicate that students might be unprepared to negotiate conflict in a diverse democracy. The study provides measures of democratic outcomes that can be used to assess the impact of diversity and service learning initiatives. (Contains 6 tables and 34 references.) (Author/SLD)

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Students' Pre-College Preparation for a Diverse Democracy

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Paper presented at the Association for Institutional Research Forum, June 5, 2001

Long Beach, CA.

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Students' Pre-College Preparation for a Diverse Democracy

Abstract

This study focused on how students' pre-college experiences predisposed them to three democratic outcomes: (a) ability to see the world from someone's else's perspectives (b) beliefs about whether conflict enhances democracy, and (c) views about the importance of engaging in social action activities. We analyzed data from three flagship universities as part of a nationally funded research project (Preparing students for a Diverse Democracy) and found females were more likely than males to report values and beliefs consistent with democratic outcomes. Participation in race/ethnic discussions, student clubs, and volunteer work, as well as studying with students of different groups, and discussing of controversial issues were significant predictors in all three models. Results also indicated that students might be unprepared to negotiate conflict in a diverse democracy. The study provides measures of democratic outcomes that can be used to assess the impact of diversity and service learning initiatives.

Students' Pre-College Preparation for a Diverse Democracy

In the past decade, there has been an increasing emphasis on the role that higher education can play in promoting civic engagement in a society where vast inequalities across communities are still evident. In addition, although K-12 institutions have long explicitly stated their mission of providing civic education, only more recently have schools articulated their role in educating citizens for a multicultural society (Banks, 1997). At the same time, we find business leaders emphasizing the need for employees who have competencies to effectively function in an increasingly diverse and global marketplace (Bikson & Law, 1994). In response, more and more higher education institutions are explicitly stating that their mission is "to prepare students to participate in a diverse democracy" (AAC & U, 1995). In recognizing their mission, colleges and universities are actively pursuing and implementing policies and curricula that are intended to increase awareness of the value of diversity for their student populations (Henley & Arnold, 1990) and produce student outcome goals that ensure meaningful participation in a diverse society. To achieve these goals, what is needed is a clearer articulation of the democratic outcomes that colleges hope to achieve amongst diverse students.

In an effort to better understand how universities are preparing students to successfully participate in an increasingly diverse society, a research project funded by the U.S. Department of Education has been undertaken. In collaboration with representatives on participating campuses, researchers on the project are exploring how colleges build bridges across multiple social divisions in practice, provide important student learning opportunities in interaction with members of diverse communities, and demonstrate growth in their students' cognitive and social skills and democratic abilities. This research project contributes to our understanding of how students' pre-college experiences (individual, family, neighborhood and high school

characteristics and experiences) predispose students to the educational outcomes enhanced through formal and informal interactions with diverse peers while in college.

The present study sought to increase understanding in this area by means of a multi-institutional study of the influence of pre-college characteristics on three student measures identified as democratic outcomes: ability to see the world from someone else's perspective, beliefs about whether conflict enhances democracy, and views of the importance of engaging in social action activities during college. The study's purpose was to determine how these three identified democratic outcomes were influenced by four sets of variables: (a) student background characteristics; (b) pre-college environment; (c) pre-college engagement in co-curricular and diversity experiences; and (d) interaction with peers.

Overview of the Literature

Learning outcomes that support and enable students to successfully participate in our diverse society can generally be thought of as democratic outcomes. "Our students, as leaders of the future, need to learn how to accept diversity, negotiate conflicts, and form coalitions with individuals and groups if they are to become prepared to be leaders in an increasingly heterogeneous and complex society" (Dey, Gurin, Hurtado, Gurin, in press, p. 17). Several basic theoretical and empirically-based premises inform this study and support this definition of democratic outcomes. First is the idea that the concept of diversity in a democracy presents a dilemma that individuals and groups must reconcile (Saxonhouse, 1992; Guarasci, Cornwell, & Associates, 1997). Second, according to learning, cognitive and social development theories, students learn and acquire skills and dispositions through interactions with others (Piaget, 1975; Selman, 1980). Third, a growing body of research indicates that interaction with diverse peers is an important factor in encouraging learning on a broad range of skills and dispositions necessary

for living in a society that is ever more complex and diverse (Astin, 1993, Gurin, 1999; Hurtado, Milem, Clayton-Pederson & Allen, 1999).

Diversity and Democracy

Many contemporary thinkers contend that commonality diminishes existing differences and that diversity is a threat to community (Etzioni, 1993), while others call for a democracy that embraces difference and requires that commonality be constructed and negotiated (Gurasci, et al., 1997). Civic education can promote political cohesion and nationalism (Wingo, 1997) or it can promote rational deliberation and teach differing ways of life (Guttman, 1987). Overall these scholars address the interplay between community and difference, and between the individual and society. These competing views have implications for the dynamics in campus contexts (in intentional practice and informal student interactions) that are inevitably reflected in students' thinking and development during college.

Linking Social, Cognitive, and Democracy outcomes

Through engagement with diverse peers, students debate and actively confront multiple points of view, and learn to manage strong emotions that conflict can engender. These cognitive and emotional processes promote the skills and thinking abilities needed to make a pluralistic democracy work. Furthermore, scholars contend that students' cognitive and social development are intertwined and, as students approach college age, they are more likely to apply cognitive abilities and skills to interpersonal situations and social problem-solving skills (Chickering & Reisser, 1991; Muss, 1988). Piaget (1975), whose work serves as the foundation for many cognitive development researchers, believed that both cognitive and social development are thought to occur through social interaction, spurred by the disequilibrium that results when one tries to reconcile one's own embedded views with that of others. For example, intercultural

perspective-taking (Kappler, 1998; Steglitz, 1993) is a cognitive skill that enables the individual to recognize the existence and affect of culture and understand how cultures vary (Ortiz, 2000). This "perspective-taking" is facilitated by social interaction. As one-sided and one-dimensional perceptions are challenged, they must be reexamined in view of ideas expressed by others. In reconciling the dissonance between one's own one-sided perspective and the point of view of others, the individual progresses to see several dimensions of an issue and learns to take another person's point of view. The cognitive nature of intercultural perspective taking is highlighted by Steglitz's (1993) model of how we come to understand how behavior and perspectives are shaped by culture, how culture influences individuals, how culturally different people may be influenced by their culture and how culture might influence the interpretation and perception of our experiences (Ortiz, 2000).

"The ability to take the perspective of another person is a cognitive skill that is interpersonal in that it enhances interactions, yet is also intrapersonal because it requires the development of empathy" (Ortiz, 2000, p. 69). In developing a multidimensional individual difference measure of empathy, Davis (1980) found the ability for individuals to adopt the perspective of others as a statistically significant component of empathy. According to his research, greater perspective-taking ability was associated with greater feelings of empathic concern for others and feelings of personal unease in the face of others' negative experiences. Students who develop these cognitively complex skills demonstrate more socio-centric behaviors, and develop in-depth and societal perspectives about situations and problems (Selman, 1980; Perry, 1970), including political awareness or concern for general social issues rather than a concern with one's own world and immediate social group (Enright, Lapsley, and

Shukla, 1979). As King and Shuford (1996) assert, a multicultural perspective (acquired through interaction and formal coursework) is a more cognitively complex perspective.

These perspectives regarding cognitive and social development open the door for examining important outcomes for participation in a pluralistic democracy. That is, students who have the ability to develop a societal perspective, exhibit empathy, and acquire a capacity to evaluate alternative perspectives on complex social problems are better prepared to take on social roles as decision-makers and negotiators of different perspectives. Ideally, these students would be better prepared for civic engagement and would be capable of participating in a democracy much like that envisioned by Guarasci et al. (1997), where democracy is constructed out of social differences. The current study begins to test this theoretical link between students' thinking, social development and democracy outcomes at college entry. These predispositions influence students' willingness to engage in learning and commitments on campus that will lead to better preparation for a diverse democracy.

Interacting with Diverse Peers

Students are likely to enter college from highly segregated high school environments across the nation (Orfield, Bachmeier, James, & Eitle, 1997), and therefore, are likely to encounter social differences for the first time in college. Cognitive and social theories suggest that such discrepancies in social interaction can spur growth and development under positive conditions (Chickering & Reisser, 1991; Piaget, 1975). Evidence is beginning to converge on the role of diverse peers in creating a broad range of educational outcomes. Students who reported interactions with diverse peers showed a greater openness to diverse perspectives and a willingness to challenge their own beliefs after the first year of college (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). Researchers also found students who interacted with diverse

peers reported more frequent discussion of complex social issues, including such things as the economy, peace, human rights equality, and justice (Springer, 1995). These studies indicate that students who interacted with diverse peers demonstrated more complex thinking that is linked with both cognitive and social development.

Several studies utilizing national longitudinal data show student interaction with diverse peers was associated with increases in cultural knowledge and understanding, leadership abilities, and commitment to promoting racial understanding (Antonio, 1998; Hurtado, 2001; Milem, 1994). The study by Hurtado (2001) examined the effect of studying with a diverse peer and found the strongest effects on civic outcomes, including acceptance of people with different beliefs and leadership ability. There were also strong relationships with learning and work-related outcomes such as critical thinking skills, the ability to work cooperatively and interpersonal skills. These outcomes can be considered important values, skills and knowledge for living in a diverse democracy.

Preliminary evidence reveals that the most effective forms of informal interaction with diverse peers reflect engagement on a range of topics, as well as participation in formal educational activities such as courses addressing social diversity, intergroup dialogues, or race awareness workshops designed to increase communication (Antonio, 1998; Chang, 1996; Gurin, Peng, Lopez, & Nagda, 1999; Springer, Palmer, Terenzini, Pascarella, & Nora, 1996). These findings are highly suggestive of the types of activities that high school students may engage in prior to college that are designed and facilitated by schools. Furthermore, these theories and research support the notion that encountering others who have diverse backgrounds and perspectives can lead to interactions that promote learning and development.

This study will establish a better baseline from which to more accurately measure the effects of college and specific diversity initiatives on students' ability to acquire desired democracy outcomes. Furthermore, it provides greater insights into the experiences and characteristics that are significant in influencing students' acquisition of skills and perspectives needed for success in a diverse democratic society. These insights and baseline information serve as important resources for the creation of more intentionally designed programs, policies and curricula aimed at producing democratic outcomes in students. Figure 1 shows the conceptual map of the relationship between student background characteristics, environmental type, engagement and interactions on the democratic outcomes used for this study.

Methods

Data Source

The data for this study came from a survey that served as a primary component of a national research project entitled Preparing Students for a Diverse Democracy. The survey focused on the pre-college experiences and attitudes of incoming students that matriculated during the 2000-2001 academic year. The survey was designed to elicit responses from incoming freshman pertaining to constructs that measure cognitive, social-cognitive, and civic outcomes. Three flagship universities, representing states in the Midwest, Northeast, and Mid-Atlantic, were chosen for this study based on the following criteria: (a) a strong commitment to diversity as evidenced by the university's mission statement and the presence of a number of diversity initiatives on campus; (b) a comparative student demographic make-up that consisted of a predominantly White student population; (c) recent success in diversifying their student body; and (d) engagement in significant community-building activities with a diverse student body.

Two of the campuses administered the survey to incoming first-year students during summer orientation sessions. Both schools offered multiple orientation sessions over the summer and allotted time for students to complete and return the surveys, yielding over 80% and 70% return rates respectively. The third school could not arrange to have the survey administered during orientation and opted to mail surveys to entering students at the beginning of the fall semester. Approximately five weeks following the initial survey mailing, undergraduate residence hall assistants delivered a second wave of surveys to non-respondents who lived in the residence halls. Additionally, since particular students of color are widely known to have lower response rates, telephone calls were made to African American and Latino students, ten weeks after the initial survey mailings, encouraging them to complete the survey in a third wave effort to boost response rates. The final survey response rate for this campus was 42%. These extra efforts indicate the difficulties inherent in administering surveys to students attending large public universities, particularly students of color.

Sample

Participants in this study included 7,980 entering first-year students. Female students were more heavily represented in the sample than males (53.8% female; 46.2% male) and the sample was predominantly White (71.0%). Students of color represented 22.5% of the sample (Asian/Pacific = 11.4%; African American = 6.6%; Latino = 4.1%; and Native American = .4%). The mean SAT composite score for respondents was 1207, and the mean high school GPA was 3.65. The majority of the sample attended public high schools (85.7%) and lived in non-urban communities (87.4%), which included suburban, rural, and small town areas. Approximately 70% of the respondents reported that their racial composition of friends was mostly or nearly all White, with 10% reporting their friends were mostly or all people of color and 19% reporting half White and half people of color. Forty percent of the respondents estimated their family

income in the upper-income bracket ($100,000 +) with 4.8% reporting low income (0-$19,999), 25.9% middle income ($20,000-$59,999), and 29.5% upper-middle income ($60,000-$99,999).

Measures

Table 1 depicts the variable names, variable types, and scales for each of the variables used in the analyses. Three dependent variables, each representing a scaled index of multiple items, were used in the analyses to measure three democratic outcomes: Ability to see multiple perspectives, Conflict enhances democracy, and Importance of social action engagement. The ability to see multiple perspectives measure is a measure replicated from the previous research conducted by Davis (1980) on empathy. The other measures were newly developed for monitoring democratic outcomes among students. Student background measures related to gender, race/ethnicity, and academic ability were derived from institutional data provided by each of the three schools participating in the study. The three schools' merged data were then combined into one dataset used for this study. Mean substitutions were used for any remaining missing academic measures. Both income and race/ethnicity were dummy-coded, and high-income and White students were used as referent groups respectively. Pre-college engagement was measured by two dichotomous variables representing high school and community type and a third single-item, continuous variable to measure the racial composition of participant's friends. Pre-college engagement was measured by a series of variables representing involvement in high school activities and diversity programs. Interaction measures were recoded to capture the amount of student interaction between people representing the same and different racial/ethnic group. Table 2 indicates that very few college entrants had the opportunity to take a diversity course or attend a diversity education program during high school, and were likely to learn about diversity from peers. Substantially fewer students, however, interacted with someone from a different racial/ethnic group prior to college.

Analyses

Weighting techniques were used to correct for the low response rate at one of the colleges used in this study. This technique employs multiple regression to adjust the returned-survey sample to the original sample population (Dey, 1995). First, institutional data, representing gender, SAT, high school GPA, and race, were merged with survey data by matching student identification numbers. Next, the response variable was regressed on the institutional data and the resultant beta coefficients were used to compute a response weight variable using the regression equation for the institution and dividing by one. This, in effect, produces weights for every respondent case and more accurately represents the entering class based on race, gender, and ability (factors that play an important role in responses to surveys). The response weight variable was then adjusted to approximate the original survey sample size for the college (response variable/mean of response). As a result, these variables were more normally distributed and provided a more accurate representation of the actual student population.

Exploratory factor analyses were also conducted, using principal axis factoring and orthogonal rotation methods, in order to reduce the number of measured variables for analyses. Factor loadings that contained a score of at least .43 or higher were retained in the development of subsequent summated rating scales. Internal validity was high for each of the three scales with Cronbach's Alpha Reliabilities ranging between .65 and .83. These results are available in Table 3.

Multiple regression analyses were employed to identify the significant determinants of each of the dependent variables: Ability to see multiple perspectives, Conflict enhances democracy, and Importance of social action engagement. Independent variables that reflected

student background characteristics, pre-college environment, pre-college engagement, and pre-college interaction patterns were entered in a hierarchical method.

Using this approach, the relative contribution of each of the four blocks of independent variables was examined. Background characteristics were entered first in order to control for variations in student backgrounds and to interpret the significance of those variables not yet entered into the regression model. Next, environmental characteristics related to the students' school, community, and friendship network were entered as these characteristics may influence opportunities for student engagement. The third block measured engagement in pre-college activities and programs related to both diversity and community service; this type of engagement is likely a precursor to interacting with diverse peers. The final block measured students' pre-college interaction with racially and ethnically diverse peers.

In order to test the reliability of the regression model, Variance Inflation Factors (VIF) and residual plots were examined in the analysis. In this way, assumptions related to linearity, independence, heteroscedasticity, and multicollinearity were all tested to ensure the validity and reliability of the model.

Limitations

The current study relies on students' self-reports of attitudes, beliefs, and experiences they held prior to attending college. There are obvious disadvantages of using such data for this purpose, including the possibility that student perceptions may not always be a true reflection of reality. However, the educational community currently lacks good, widely used measures of cognitive and affective development for college students on a national level (Hurtado, 2001). Thus, decisions at the postsecondary level related to student and academic affairs are largely based on assumptions as to what is best for college students rather than testing any particular approach with the use of empirical data. The use of self-reported data, therefore, represents an

improvement to assumptive-based decision-making, and may actually be the best data available. Furthermore, by using institutional data directly from the three colleges, student background variables are less vulnerable to self-report bias.

One of the institutions used in this study had a relatively low response rate, representing less than half of the total freshman class. Weighting techniques were used to address the low response rate and more accurately reflect upon the entire freshman class. While weighting represents a statistical approximation, this technique is an empirically tested and proven method for adjusting low response rates. Additionally, this study does not examine the relative comparison of different racial/ethnic groups; rather, White students are used as a referent group in which to interpret the impact of different race/ethnic groups. This was conducted to first identify group differences; the results will be used to guide future studies that compare separate models for each of the different racial/ethnic groups.

Results

We conducted three hierarchical multiple regression equations to investigate the relationship between students' background characteristics, pre-college environment, pre-college engagement, and interaction with same and different racial groups and the three outcome variables. The results of the analyses for each of the block entries are available in Tables 4, 5, and 6.

Our first regression model explained 5% of the total variance in the ability to see multiple perspectives (F (23, 7956) = 19.4, $p < .001$). Each block entry produced a significant change in the model ($p < .01$). Females were more likely than males to report an ability to see the world from someone else's perspective. It was surprising to note that middle-income students were also more likely than either high or low-income students to report this ability. Although some initial racial/ethnic differences were identified, only African American students showed a

significant difference from White students in the final model of multiple perspective-taking ($p < .05$). It is interesting to note that this difference was negative, suggesting that African American respondents were less likely to agree with statements indicating the ability to see multiple perspectives as compared to White students.

Controlling for student characteristics, all of the pre-college engagement variables were significant with the exception of participation in sports. Attending a diversity class or program was not significant in the final model, although all other pre-college engagement variables remained significant. This is not surprising given the small percentage of students (6-8%) who stated they participated in school-facilitated diversity activities. It is important to note that students who discussed racial/ethnic issues (ß = .045) and reported that they had some skill in discussing controversial issues (ß = .126) were most likely to report multiple-perspective-taking skills ($p< .001$). Similarly, student pre-college interaction with different race/ethnic groups remained highly significant throughout the model ($p < .01$).

Our second regression model explained 10% of the total variance in the Conflict Enhances Democracy scale ($F (23, 7956) = 39.41, p < .001$). The total variance explained by this model increased from 4% with only student background variables to 10% when school activities were added to the regression model. This suggests that students who participated in high school activities are better prepared to accept conflict as part of the democratic process. The results from this model imply that females and students with high SAT scores are more likely to agree with statements suggesting that conflict enhances democracy ($p < .001$). Asian American students (ß = -.048), however, are less likely to agree with this belief than White students or other students of color.

Holding student background variables constant in the first regression block produced similar results as the model for multiple perspectives. Most all of the pre-college engagement

variables were highly significant ($p < .001$), with the exception of participation in volunteer work ($p < .01$) and participation in sports which was not significant. However, it is surprising to note that interaction with students from the same race/ethnicity as well as with students from different racial/ethnic backgrounds was highly significant ($p < .001$) when controlling for background variables and remained significant throughout each blocked entry. The final model indicates that participation in race/ethnic discussions, student clubs, and the ability to discuss controversial issues are highly significant, positive determinants of students' agreement that conflict enhances democracy ($p < .001$). While volunteer work remained significant in the final model, students who participate in volunteer work were less likely to endorse statements that conflict enhances democracy.

The third regression model explained 17% of the total variance in the scale for the importance of social action engagement (F (23, 7956) = 70.38, $p < .001$); this represented the strongest of the three models under investigation. The total variance explained by this model increased by 11% when pre-college engagement variables were added to the regression model. This indicates that pre-college opportunities for engagement are strongly related to students' developing values of becoming involved in social action activities.

Female students were more likely than males and students from middle-income families more likely than students from other income categories to place importance on social action engagement. Strong high school GPAs were also highly predictive of the importance of social action engagement throughout each block entry of the regression model ($p < .001$). Furthermore, pre-college engagement variables remained highly significant throughout each stage of the model with only participation in sports producing a negative effect on the outcome measure. The significant time and weekend commitments that sports requires may prevent student athletes from placing a priority on social action activities, resulting in the negative effect.

In contrast, both school-facilitated interactions with diversity and informal activities (particularly discussing racial issues, volunteer work, and ability to negotiate controversial issues) are associated with positive perceptions about the importance of social action. Students who interacted with different race/ethnic groups ($p < .001$), as opposed to those who interacted with the same race/ethnic group (no significant effect), were more likely to attach importance to participating in some type of social action. This was supported by the finding that students who reported a predominantly White friendship group were less likely to place value on the importance of social action engagement.

Discussion

Several patterns of effects exist across all three democratic outcomes. First, entering college females are more likely than males to report values and beliefs consistent with democratic outcomes. Because leadership for the future is most likely to come from both genders, these differences are cause for concern. Men as well as women will need to develop the skills for negotiating social difference in the workplace and ethical decision-making. Second, students' pre-college engagement produces the largest change in the total variance explained in each of the three outcome models. That is, differences in commitment to democratic outcomes is less likely to be explained by demographic variables among entering students than activities and opportunities to engage with diverse peers. As a result, participating in race/ethnic discussions, student clubs, and volunteer work as well as studying with different groups and discussing controversial issues are significant predictors in all three models.

Students' interactions with different race/ethnic groups also were a significant predictor of all three outcomes, suggesting a strong relationship between these interactions and the development of democratic skills and values. Overall, students who enter college with substantial interactions with diverse peers (i.e. peers from racial/ethnic group different than their own) are

more likely to see the world from someone else's perspective and value the importance of social action engagement to create change in society. The one exception involves the belief that conflict enhances democracy. Students' who had substantial interactions with peers, regardless of the peers' racial/ethnic identity, were more likely to agree that conflict enhances democracy. This also suggests that the more students interact with peers both within and outside of their own racial/ethnic group, the more likely their own views will be challenged; thus broadening their understanding of a democratic society. Despite the positive influence of interaction with peers, the results may also indicate that entering college students are relatively unprepared for negotiating and participating in such a democracy. The relatively low proportion of variance explained may suggest that such outcomes are more difficult to acquire prior to college entry. Students may not be as prepared to meet the challenging demands of college that result from the diversity inherent in the college environment, despite the subsequent benefits such diversity holds. This suggests that college will play an important role in facilitating the development of these skills. The view that democracy can be constructed from differences coupled with students' ability to assume multiple perspectives are both strongly associated with cognitive development. The acquisition of this democratic perspective may be accelerated through co-curricular and curricular learning in college as students become exposed to differing ways of life, the histories of many peoples, and contact with diverse peers. Future work will explore the link between these democratic outcomes and cognitive development among college students.

Implications for Practice

A better understanding of students' perspective-taking skills, values to promote a better society, and beliefs about democracy may facilitate the type of college programs and curricula required to prepare students for participating in a diverse democracy and handling complex social problems. Virtually all forms of engagement with diverse peers (inside and outside of the

classroom) may facilitate student commitment to taking responsibility for making the world a better place (i.e. diminishing inequality and working to end poverty). Facilitating student exposure to diverse people and perspectives can be a prime vehicle for enhancing student preparation for a diverse democracy. Yet, considerably more thought must be given to help students learn how to negotiate social differences, with attention to intergroup relations that enable students to assume multiple perspectives. Current service learning models may serve as an example for the integration of perspectives, experience, and emotion. At some large public universities, however, much is left up to students' own preferences for engagement with diversity. Students often prefer the comfort of familiarity rather than risk what can be learned from the disequilibrium that results from encounters with others from substantially different social backgrounds. Practitioners must be attentive in promoting cognitive and affective student development (i.e. students' hearts and minds) if they hope to successfully prepare students for living in a diverse world.

From an institutional research perspective, the current study provides measures of democratic outcomes that can be used to assess the impact of diversity and service learning initiatives. Institutional researchers are working with faculty and campus practitioners to maximize the use of the data in campus planning and reports about the civic mission of the respective universities. The campuses in this study are preparing reports of the data collected at college entry to share with faculty groups, student service units, and academic programs. At the same time, they are sharing data with other collaborating campuses to help assess their relative progress toward diversity and learning goals. Campuses may use the data in the future to help monitor the impact of initiatives or intentionally design activities to achieve greater impact in their goals to prepare students for a diverse democracy.

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Figure 1. Pre-college Variables effect on Democratic Outcomes

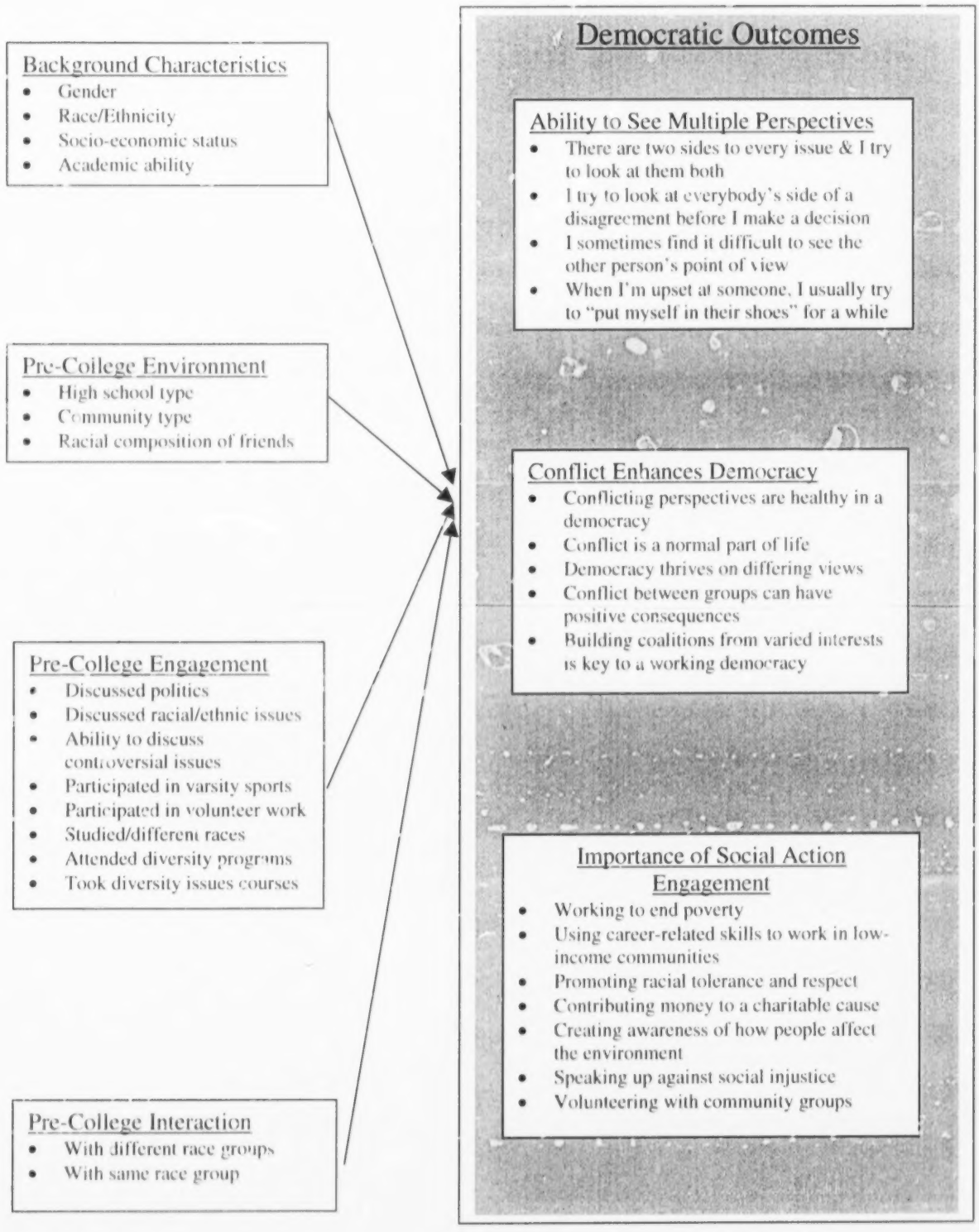
Background Characteristics
Gender
Race/Ethnicity
Socio-economic status
Academic ability
Pre-College Environment
High school type
Community type
Racial composition of friends
Pre-College Engagement
Discussed politics
Discussed racial/ethnic issues
Ability to discuss controversial issues
Participated in varsity sports
Participated in volunteer work
Studied/different races
Attended diversity programs
Took diversity issues courses
Pre-College Interaction
With different race groups
With same race group
Democratic Outcomes
Ability to See Multiple Perspectives
There are two sides to every issue & I try to look at them both
I try to look at everybody's side of a disagreement before I make a decision
I sometimes find it difficult to see the other person's point of view
When I'm upset at someone, I usually try to "put myself in their shoes" for a while
Conflict Enhances Democracy
Conflicting perspectives are healthy in a democracy
Conflict is a normal part of life
Democracy thrives on differing views
Conflict between groups can have positive consequences
Building coalitions from varied interests is key to a working democracy
Importance of Social Action Engagement
Working to end poverty
Using career-related skills to work in low-income communities
Promoting racial tolerance and respect
Contributing money to a charitable cause
Creating awareness of how people affect the environment
Speaking up against social injustice
Volunteering with community groups

Table 1

Summary of Variables and Indices in the Research Model

Variable name	Variable type	Scale Range
Dependent Democratic Outcomes		
Ability to see multiple perspectives	Scaled index, four items	1=Strongly disagree to 4=Strongly agree
Conflict enhances democracy	Scaled index, five items	1=Strongly disagree to 4=Strongly agree
Importance of social action engagement	Scaled index, seven items	1=Not important to 4=Essential
Student Background Characteristics		
Student's gender	Dichotomous	0=Male, 1=Female
Student's race/ethnicity	Dummy-coded	Native American, African American, Asian, and Latino students. The referent group consisted of White students.
Student's SAT score	Single-item, continuous	Combined math and verbal SAT score or converted ACT score (400-1600 scale)
Student's high school GPA	Single-item, continuous	1=D, 2=C, 3=B, 4,5=A
Student's estimated family income	Dummy-coded	Low (0-$19,999), middle ($20,000-$59,999), upper-middle ($60,000-$99,999) income. The referent group had income of $100,000 +).
Pre-College Environment		
High school type	Dichotomous	0=Non-public, 1=Public
Community type	Dichotomous	0=Non-urban, 1=Urban
Racial composition of friends	Single-item, continuous	1=All People of Color to 5=All White
Pre-College Engagement		
Participated in race/ethnic discussions	Single-item, continuous	1=Never to 5=Daily
Participated in student clubs	Single-item, continuous	1=Never to 5=Daily
Participated in volunteer work	Single-item, continuous	1=Never to 5=Daily
Participated in varsity sports	Single-item, continuous	1=Never, to 5=Daily
Studied with different race/ethnic group	Single-item, continuous	1=Never, to 5=Daily
Ability to discuss controversial issues	Single-item, continuous	1=Major weakness to 5=Major strength
Attended a diversity program	Dichotomous	0=No, 1=Yes
Took a diversity course	Dichotomous	0=No, 1=Yes
Pre-College Interaction		
Interaction with different race/ethnic group	Single-item, continuous	1=None to 4=Substantial interaction.
Interaction with same race/ethnic group	Single-item, continuous	1=None to 4=Substantial interaction

Table 2

Descriptive Statistics for Selected Variables in the Analyses

(n = 7980)

Variable name	Mean	Standard Deviation
Participated in race/ethnic discussions[1]	3.01	.99
Participated in student clubs[1]	3.57	1.22
Participated in volunteer work[1]	2.89	1.02
Participated in sports[1]	3.13	1.82
Studied with different race/ethnic groups[1]	3.24	1.36
Ability to discuss controversial issues[1]	3.88	.89
Attended a diversity program[2]	.06	.24
Took a diversity course[2]	.08	.27
Interaction with different race/ethnic group[3]	2.48	.60
Interaction with same race/ethnic group[3]	3.89	.41

[1] Five-point scale: From "Never" = 1 to "Daily" = 5.

[2] Two-point scale: From "No" = 0 to "Yes" = 1.

[3] Four-point scale: From "No interaction" = 1 to "Substantial Interaction" = 4.

Table 3

Factor Loadings and Reliabilities for Dependent Variables

Factor and survey items	Factor loading	Internal consistency (Alpha)
Ability to see multiple perspectives[1] (n = 7360)		.65
There are two sides to every issue and I try to look at them both.	.708	
I try to look at everybody's side of a disagreement before I make a decision.	.676	
When I'm upset at someone, I usually try to "put myself in their shoes" for a while.	.470	
I sometimes find it difficult to see the "other person's" point of view.[2]	-.444	
Conflict enhances democracy[1] (n = 7360)		.73
Democracy thrives on differing views.	.692	
Conflicting perspectives is healthy in a democracy.	.644	
Conflict between groups can have positive consequences.	.599	
Building coalitions from varied interests is key to a working democracy.	.525	
Conflict is a normal part of life.	.430	
Importance of social action engagement[3] (n = 7132)		.83
Speaking up against social injustice.	.691	
Volunteering with community groups or agencies.	.680	
Promoting racial tolerance and respect.	.661	
Working to end poverty.	.628	
Using career-related skills to work in low-income communities.	.605	
Contributing money to a charitable cause.	.586	
Creating awareness of how people affect the environment.	.550	

[1] Four-point scale: From "Strongly disagree" = 1 to "Strongly agree" = 4.

[2] Oblique rotation reverses the sign of the factor in the estimation process.

[3] Four-point scale: From "Not important" = 1 to "Essential" = 4.

Table 4

Beta Coefficients for Blocked Entry Regression on Ability to See Multiple Perspectives (n = 6519)

Variable Name	Block 1	Block 2	Block 3	Block 4
Student Background Characteristics				
Student's gender (female)	.114***	.114***	.101***	.101***
Native American student	-.011	-.011	-.013	-.017
African American student	.011	-.014	-.023	-.025*
Asian/Pacific American student	.029*	.007	.010	.008
Latino/a student	.036**	.027*	.018	.014
Low income	.017	.012	.021	.022
Middle income	.053***	.051***	.056***	.057***
Upper-middle income	.019	.020	.021	-.021
Student's SAT score	.019	.020	-.007	-.009
Student's HSGPA	.007	.005	.005	.006
Pre-College Environment				
High school type	*.006*	.007	.014	.013
Community type	*.013*	.003	-.002	-.003
Racial composition of friends	*-.064****	-.064***	-.027	-.020
Pre-College Engagement				
Participated in race/ethnic discussions	*.111****	*.106****	.047***	.045***
Participated in student clubs	*.073****	*.072****	.029*	.030*
Participated in volunteer work	*.070****	*.068****	.028*	.027*
Participated in varsity sports	*-.014*	*-.010*	-.025*	-.026*
Studied with different race/ethnic group	*.096****	*.087****	.046***	.035**
Ability to discuss controversial issues	*.156****	*.153****	.127***	.126***
Attended a diversity program	*.029***	*.027**	.005	.005
Took a diversity class	*.033***	*.031***	.004	.004
Pre-College Interaction				
Interaction with different race/ethnic group	*.085****	*.075****	*.036***	.036**
Interaction with same race/ethnic group	*-.001*	*-.008*	*-.011*	-.012
R^2	.018	.021	.052	.053
Change in R^2	.018***	.003***	.031***	.001*
F	14.30***	12.94***	20.76***	19.37***

*p < .05, **p < .01, ***p < .001

Beta coefficients presented in smaller type italics represent the beta coefficient for each variable not in the model if it were to be entered by itself in the next step.

Table 5

Beta Coefficients for Blocked Entry Regression on Conflict Enhances Democracy

(n = 6519)

Variable Name	Block 1	Block 2	Block 3	Block 4
Student Background Characteristics				
Student's gender (female)	.046***	.046***	.040***	.038***
Native American student	-.021	-.021	-.024*	-.018
African American student	.034**	.028*	.014	.019
Asian/Pacific American student	-.072***	-.077***	-.063***	-.048***
Latino/a student	-.001	-.003	-.013	-.006
Low income	-.008	-.009	.004	.005
Middle income	-.006	-.006	-.0002	.0004
Upper-middle income	.005	.005	.005	.005
Student's SAT score	.169***	.168***	.127***	.126***
Student's HSGPA	.020	.019	.025*	.024
Pre-College Environment				
High school type	*-.002*	-.002	.004	.002
Community type	*-.001*	-.004	-.010	-.011
Racial composition of friends	*-.015*	-.016	.029*	.042**
Pre-College Engagement				
Participated in race/ethnic discussions	*.159****	*.162****	.091***	.086***
Participated in student clubs	*.084****	*.084****	.046***	.045***
Participated in volunteer work	*.032***	*.031***	-.032**	-.033**
Participated in varsity sports	*-.004*	*-.004*	-.019	-.020
Studied with different race/ethnic group	*.089****	*.096****	.040**	.029*
Ability to discuss controversial issues	*.228****	*.228****	.193***	.192***
Attended a diversity program	*.046****	*.046****	.014	.014
Took a diversity class	*.055****	*.055****	.017	.016
Pre-College Interaction				
Interaction with different race/ethnic group	*.081****	*.086****	*.035***	.034**
Interaction with same race/ethnic group	*.047****	*.046****	*.042****	.042***
R^2	.036	.036	.100	.102
Change in R^2	.036***	.0002	.064***	.002***
F	29.68***	22.95***	42.05***	39.41***

*p < .05, **p < .01, ***p < .001

Beta coefficients presented in smaller type italics represent the beta coefficient for each variable not in the model if it were to be entered by itself in the next step.

Table 6

Beta Coefficients for Blocked Entry Regression on Importance of Social Action Engagement (n = 6519)

Variable Name	Block 1	Block 2	Block 3	Block 4
Student Background Characteristics				
Student's gender (female)	.189***	.192***	.151***	.151***
Native American student	-.005	-.005	-.008	-.010
African American student	.068***	.024*	.004	.004
Asian/Pacific American student	.026*	-.011	-.019	-.016
Latino/a student	.049***	.031**	.016	.014
Low income	-.001	-.008	.004	.006
Middle income	.032**	.032**	.036**	.037***
Upper-middle income	.008	.012	.010	.011
Student's SAT score	.043**	.043**	.009	.007
Student's HSGPA	.052***	.051***	.045***	.046***
Pre-College Environment				
High school type	*-.033***	-.032**	-.009	-.011
Community type	*.018*	-.005	-.017	-.019
Racial composition of friends	*-.113****	-.113***	-.049***	-.039**
Pre-College Engagement				
Participated in race/ethnic discussions	*.252****	*.242****	.146***	.142***
Participated in student clubs	*.150****	*.147****	.034**	.035**
Participated in volunteer work	*218****	*.214****	.150***	.149***
Participated in varsity sports	*-.034***	*-.028**	-.056***	-.057***
Studied with different race/ethnic group	*.162****	*.142****	.045***	.032*
Ability to discuss controversial issues	*.207****	*.203****	.131***	.129***
Attended a diversity program	*.089****	*.085****	.034**	.034**
Took a diversity class	*.116****	*.111****	.052***	.051***
Pre-College Interaction				
Interaction with different race/ethnic group	*.136****	*.117****	*.045****	.045***
Interaction with same race/ethnic group	*.022*	*.011*	*.0004*	-.0004
R^2	.047	.057	.168	.169
Change in R^2	.047***	.010***	.110***	.002***
F	39.28***	37.23***	76.26***	70.38***

*p < .05, **p < .01, ***p < .001

Beta coefficients presented in smaller type italics represent the beta coefficient for each variable not in the model if it were to be entered by itself in the next step.